AMENDMENTS TO THE DRAWINGS

Submitted herewith replacement drawings to comply with the Examiner's objections.

Attachment: 2 Replacement Sheet(s)

REMARKS

Claims 2-10, 12-18, 20 and 21 now stand in the application, new claims 20 and 21 having been added. Reconsideration of the application and allowance of all claims are respectfully requested in view of the above amendments and the following remarks.

The undersigned recognized that the amended drawings were inadvertently omitted from the response filed May 30, 2006. The drawings are attached here.

When removing the unusual abbreviations from the drawings, it was necessary to add reference numbers to the drawings, and then necessary to amend the specification to replace the abbreviations with reference numbers. The changes are extensive enough that a second substitute specification is believed appropriate. A substitute specification will be submitted shortly.

The undersigned notes that there were no comments in the previous response regarding the changes made to the claims in addition to rewriting certain claims in independent form. The following comments are submitted by way of explanation.

"Sure" data sequence is simply a predefined data sequence that makes up the alignment word. This has been clarified in the claims and also in the specification.

As to the term "substantially," it could be deleted from the claims as redundant, because the word "corresponding" already does not require something to be exactly equal, so the terms "corresponding" and "substantially corresponding" are not of different scope. The specification makes it clear that the phase measurement is conducted during the transit of the alignment word. The degree of correspondence between the phase measurement window and the alignment word

transit time has to be sufficient to allow this to happen, and to avoid the impact of possibly irrelevant samples as discussed, e.g., in the last three lines of paragraph [0034] of the specification. The meaning of "substantially" would be clear to one of skill in the art on reading the present application, but it is in any event now replaced with the word "approximately" which would hopefully be more acceptable to the examiner.

The editorial changes requested by the examiner in paragraphs 3-4 of the Office action have been made.

The claims have been further editorially amended to respond to the issues raised by the examiner in paragraphs 5-7 of the Office action. The only comments appropriate in light of the self-explanatory amendments are that antecedent basis for the selection signals recited in claim 17 is found at line 3 of claim 14.

As to the prior art rejections, claims 2-10 are rejected for anticipation by Fourcade (USP 4,390,985) and claims 12-17 are rejected as unpatentable over Fourcade in view of Farwell (USP 5,870,445).[1] These rejections are respectfully traversed.

In the arrangement shown in Fig. 1, a received frame DIN of serial data is converted to parallel form in a serial-to-parallel converter 12. To do this properly, the serial data must be phase aligned with the clock signal which drives the S/P converter 12. This is done in the phase alignment circuit 10. It is also the case that the received frame will have (e.g., in the case of an SDH frame) its first twenty-four bytes used to carry a known data sequence which can be used to

[1] There is no prior art rejection of claim 18, nor is there an indication of allowable subject matter recited in claim 18. Examination on the merits of claim 18 is respectfully requested.

align the frame properly. For this purpose, the rotator circuit 16 and alignment word recognition circuit 18 operate together to align the frame so that an alignment word can be properly recognized.

A unique feature of claims 2, 10 and 12 is that alignment word is provided with a particular transition which is contained within a predefined data sequence and which can be used for phase alignment purposes. The phase alignment circuit 10 is to use this, so it is controlled to watch for this transition during a time period substantially corresponding to the time during which the alignment word is passing through.

The examiner has referred to a reference signal SR in Fourcade, but has not identified where in Fourcade there is a predefined data sequence that will be included in the data flow, and where there is the detection of a particular logic transition within this predefined data sequence. Accordingly, it is submitted that claims 2 and 10 patentably distinguish over Fourcade.

In addition, claims 3-9 have been amended to depend on a new independent claim 20. This claim specifies that a reference clock signal has a frequency which is equal to the nominal frequency of the data flow. In Fourcade, synchronization is obtained by using a clock which is plesiochronous with data (i.e., the frequency of the data is different from the frequency of the reference clock within a defined value), while claim 20 requires that frequency of the data is equal to the frequency of the reference clock. Thus, claims 20 and 3-9 patentably distinguish over Fourcade for this reason.

Further, new claim 20 requires that the synchronization is achieved by delaying the data ("a delay line in said data flow "), while in Fourcade the synchronization is achieved by delaying

the clock, although in Fourcade there is a delay also of the data but this is not used for achieving synchronization in the manner recited in claim 20.

A third difference is that in new claim 20 the data is synchronous ("time division frames"), i.e., the frequency of the data is always the same, while in Fourcade the data is in packets, i.e., the frequency can change between different packets.

For all of these reasons, claim 20 and its dependent claims 3-9 are believed to patentably distinguish over Fourcade.

Regarding the rejection of claims 12-17 over Fourcade in view of Farwell, claim 12 is similar to claim 2 in reciting the detection of a particular logic transition contained within a predefined data sequence contained in the input data flow. The examiner has not identified a particular logic transition being detected and which fits this description.

Further, claims 13-17 have been amended to depend from a new claim 21 which is similar to claim 20 in reciting that frequency of the data is equal to the frequency of the reference clock, that the synchronization is achieved by delaying the data, and that the data is synchronous, so that claim 21 and its dependent claims 13-17 distinguish over the art for the same reasons as given above with respect to claims 20 and 3-9.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/DJCushing/
David J. Cushing
Registration No. 28,703

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: December 26, 2006